OIPE
AUG 23 2007
PATENT & TRADEMARK OFFICE

REPLACEMENT SHEET

Centrata IT Services Catalog (Reference Implementation)

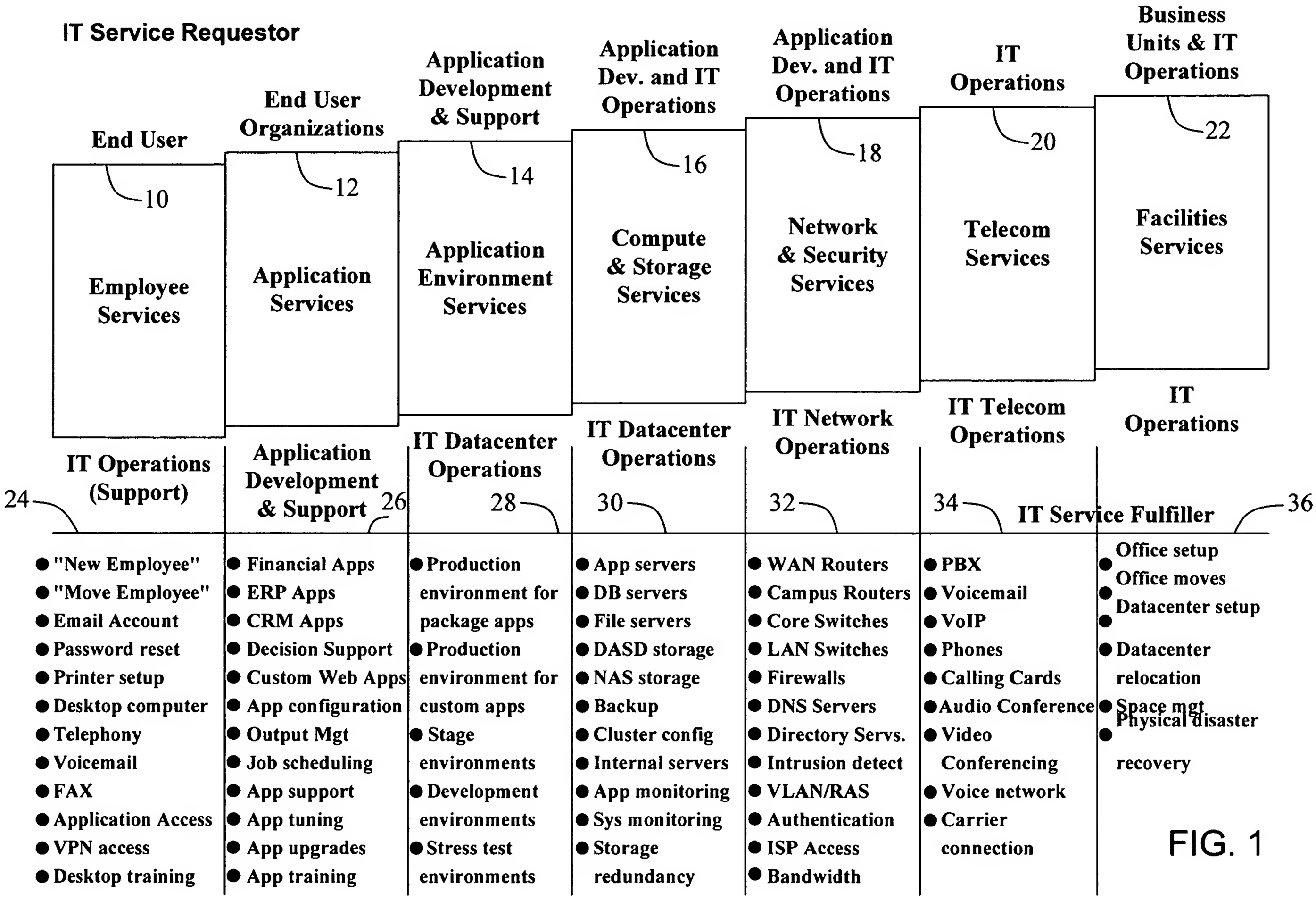
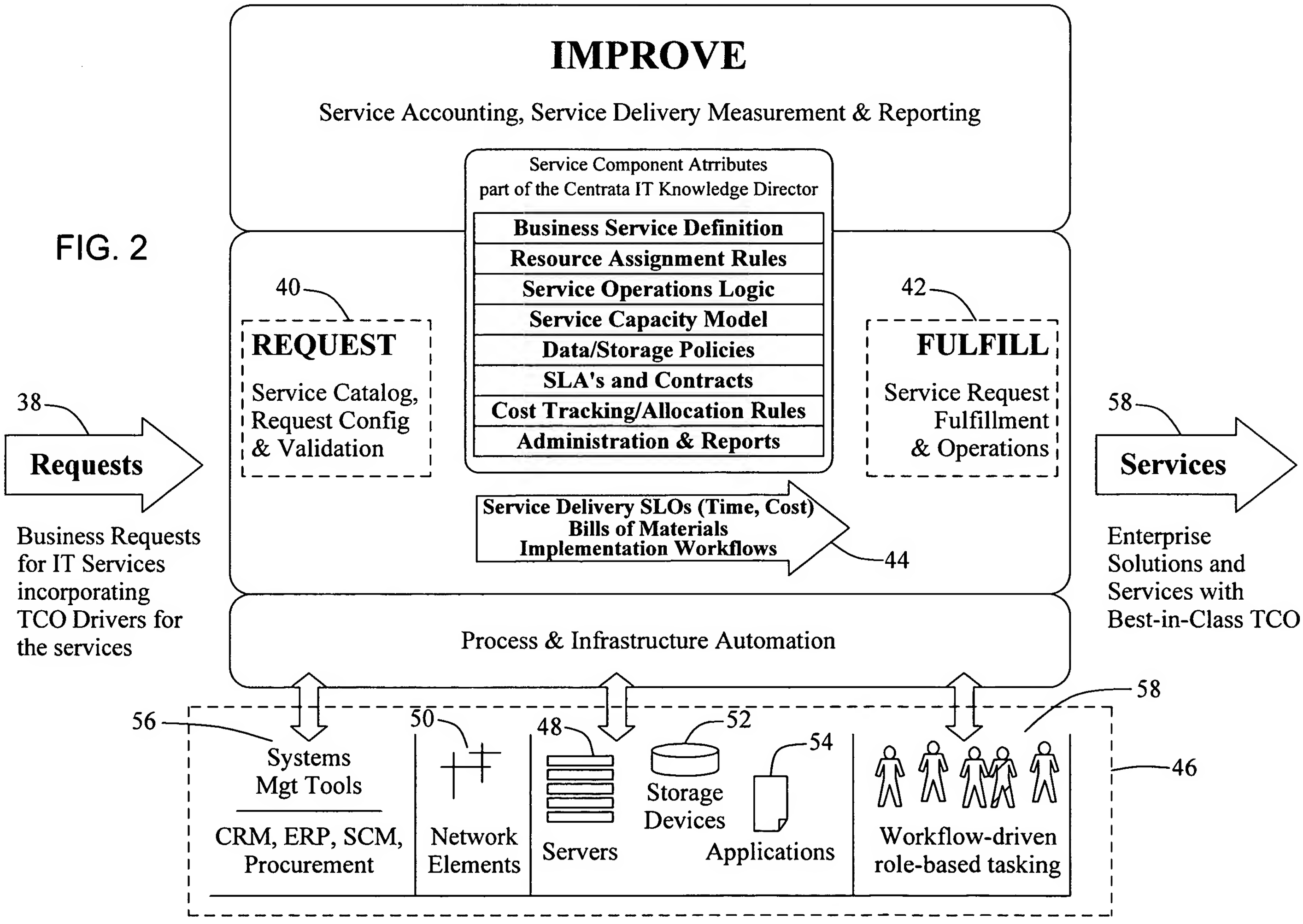


FIG. 1

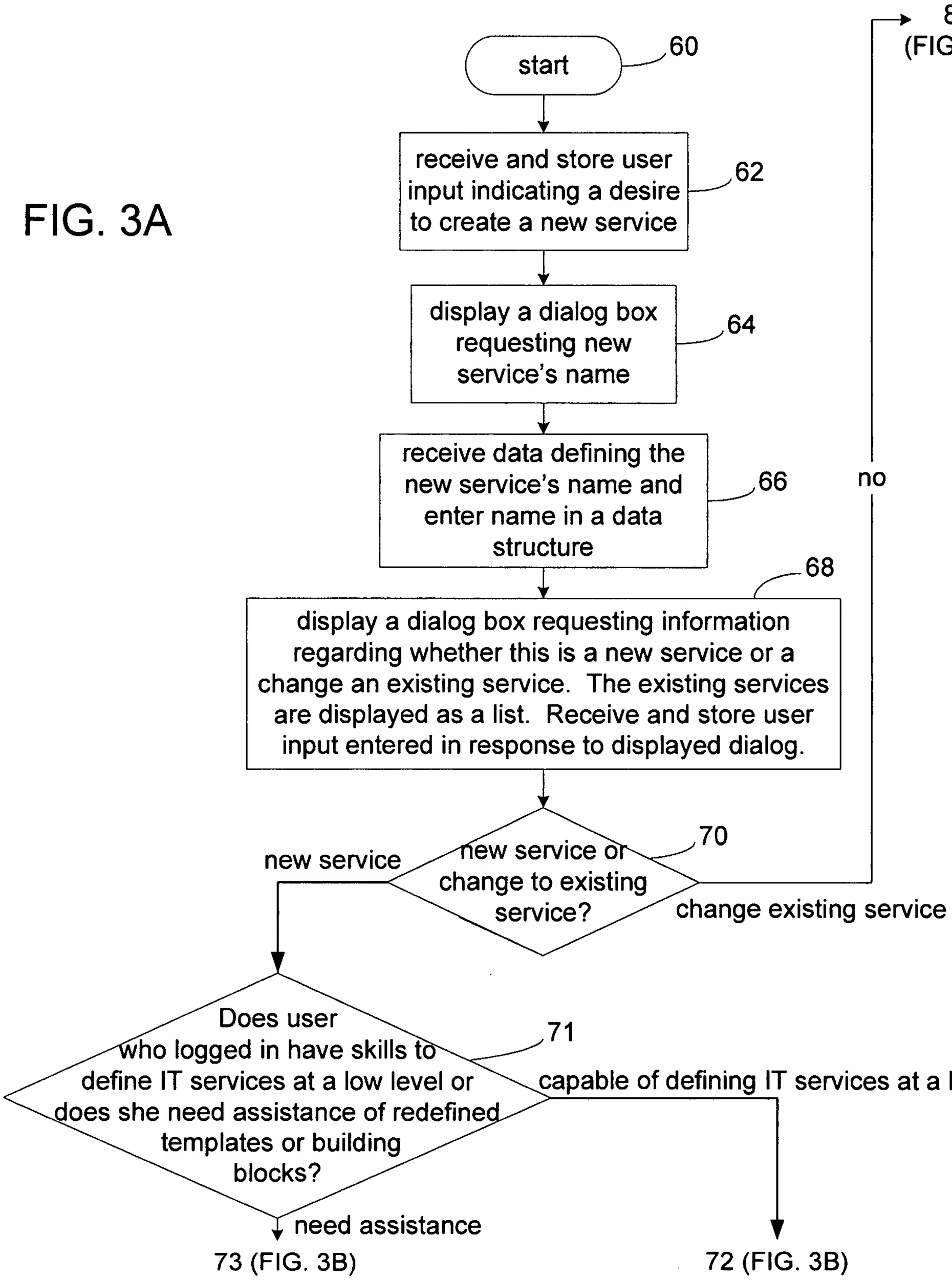
FIG. 2


IMPROVE
Service Accounting, Service Delivery Measurement & Reporting
Service Component Atrributes
part of the Centrata IT Knowledge Director
Business Service Definition
Resource Assignment Rules
Service Operations Logic
Service Capacity Model
Data/Storage Policies
SLA's and Contracts
Cost Tracking/Allocation Rules
Administration & Reports
40
REQUEST
Service Catalog, Request Config & Validation
42
FULFILL
Service Request Fulfillment & Operations
38
Requests
Business Requests for IT Services incorporating TCO Drivers for the services
58
Services
Enterprise Solutions and Services with Best-in-Class TCO
Service Delivery SLOs (Time, Cost)
Bills of Materials
Implementation Workflows
44
Process & Infrastructure Automation
56
Systems Mgt Tools
CRM, ERP, SCM, Procurement
50
Network Elements
48
Servers
52
Storage Devices
54
Applications
58
Workflow-driven role-based tasking
46

REPLACEMENT SHEET

PROCESS CARRIED OUT BY A COMPUTER TO INTERACT WITH AN IT PROFESSIONAL TO BUILD A SERVICE CATALOG

FIG. 3A



REPLACEMENT SHEET

FIG. 3B

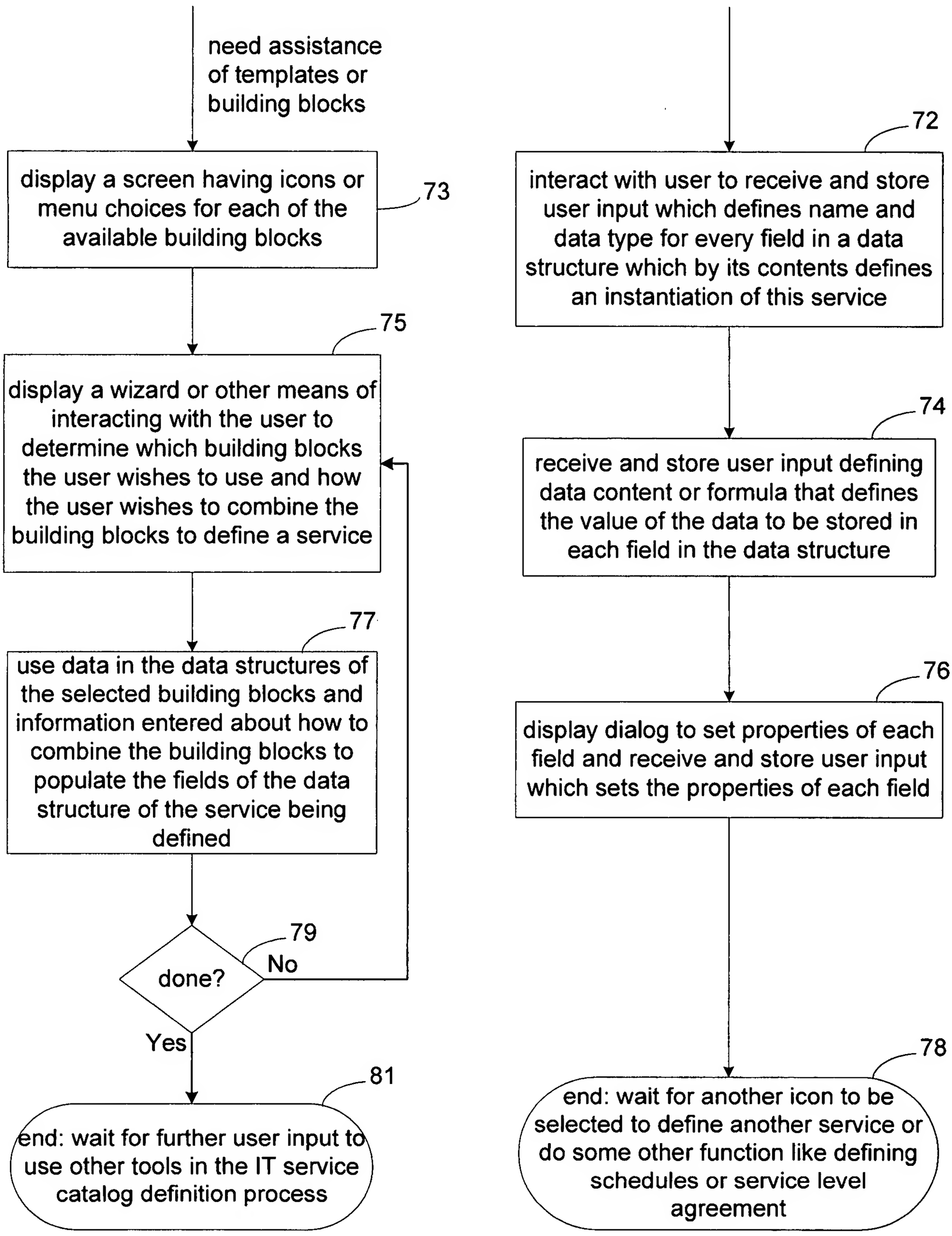


FIG. 3C

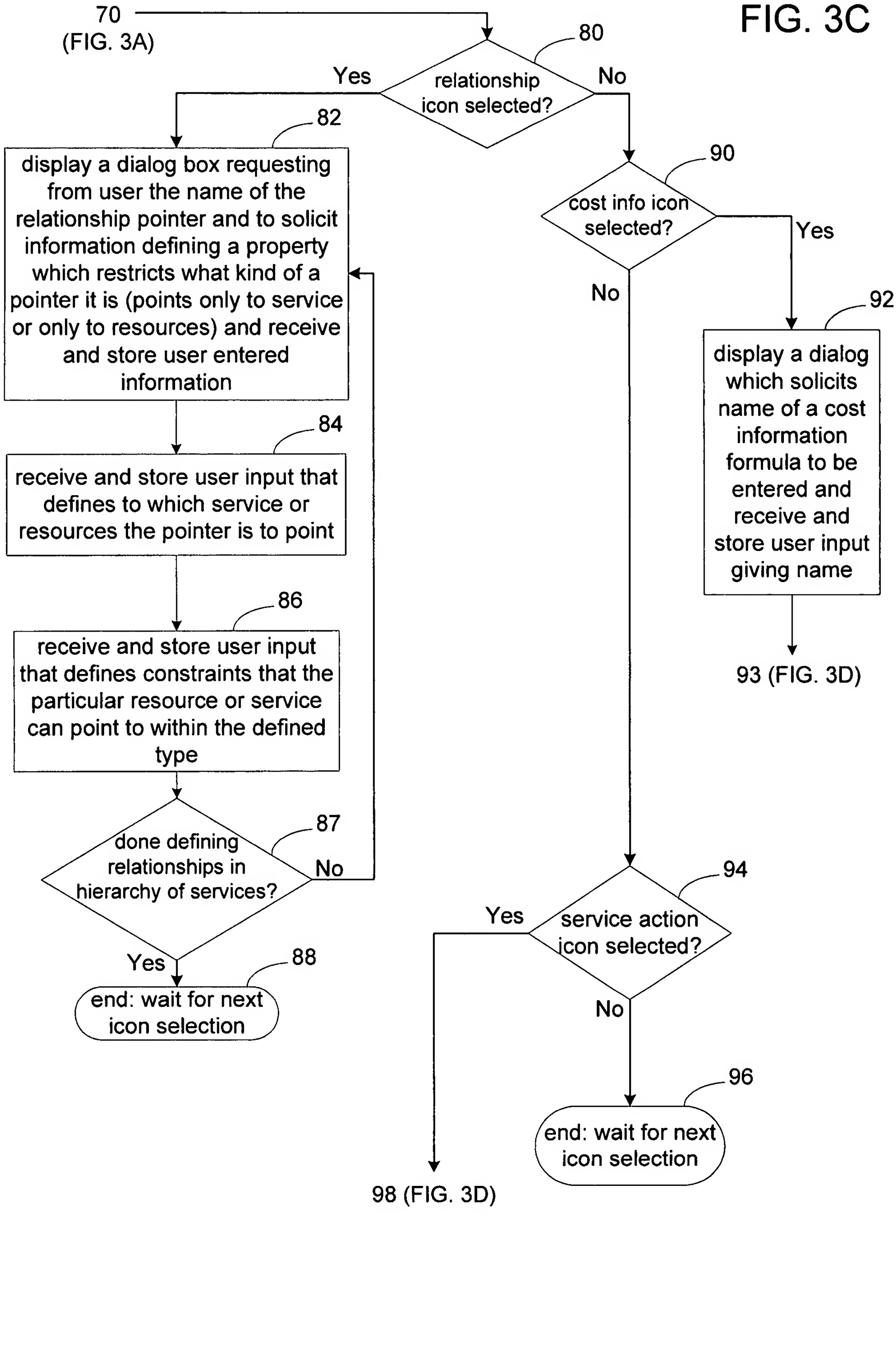
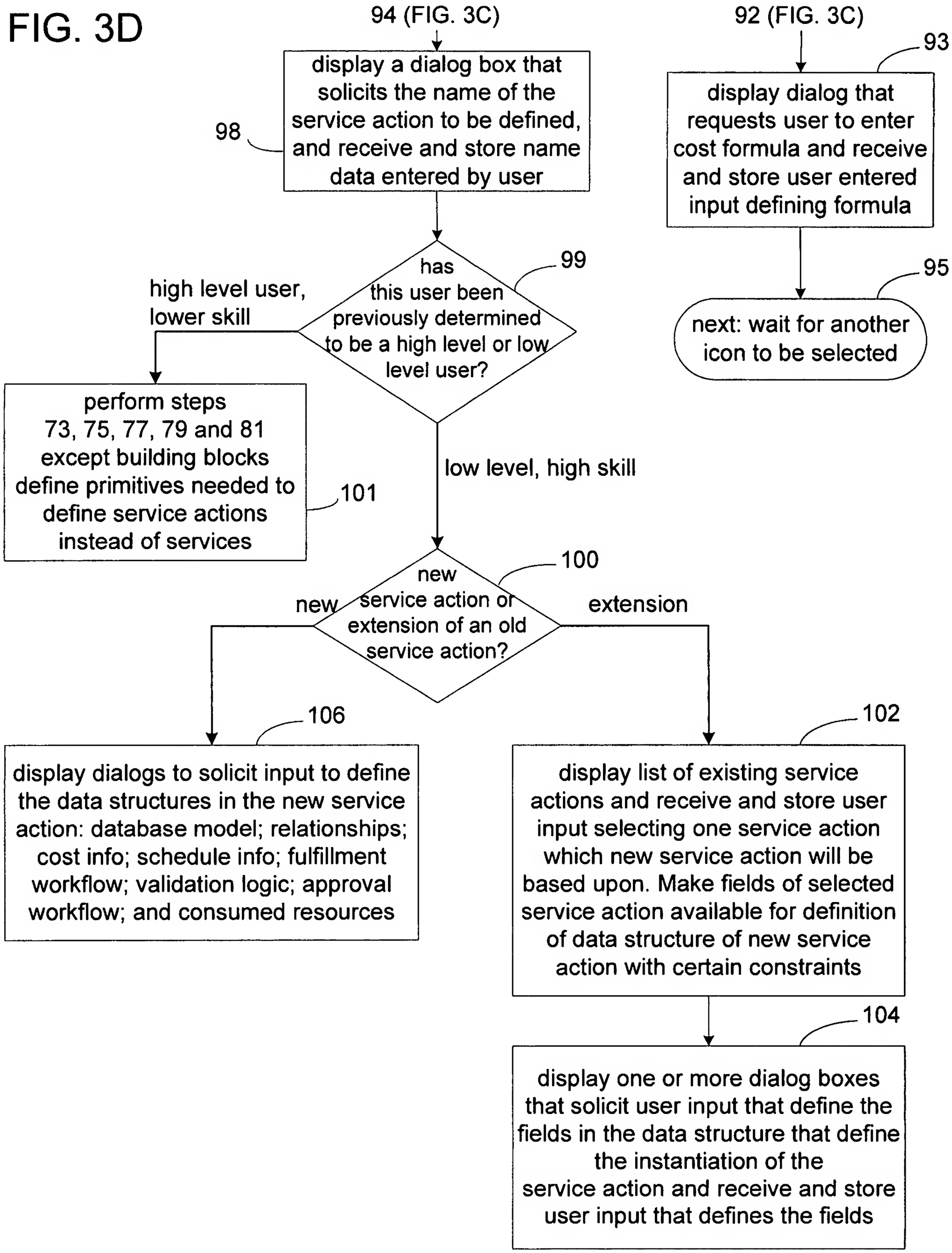
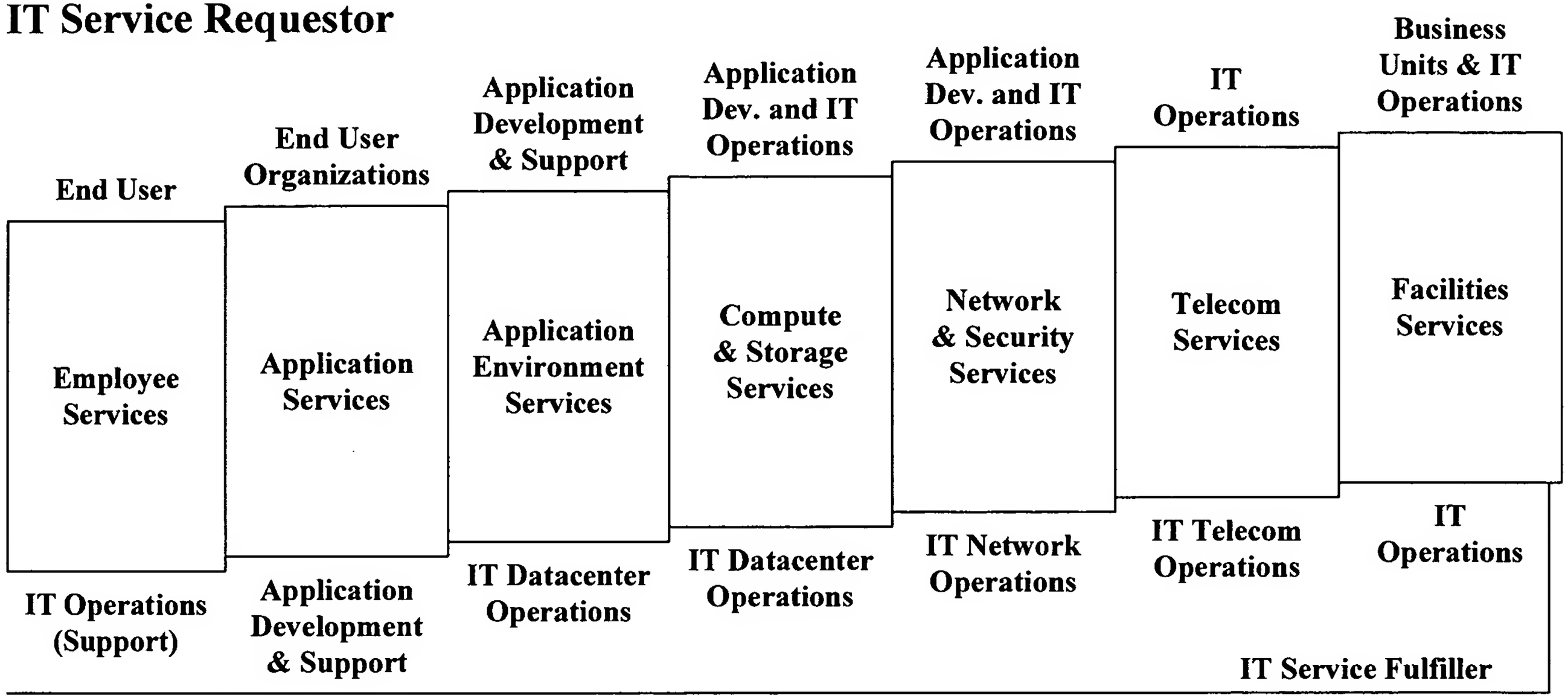

70
(FIG. 3A)
80
relationship icon selected?
Yes
No
82
display a dialog box requesting from user the name of the relationship pointer and to solicit information defining a property which restricts what kind of a pointer it is (points only to service or only to resources) and receive and store user entered information
84
receive and store user input that defines to which service or resources the pointer is to point
86
receive and store user input that defines constraints that the particular resource or service can point to within the defined type
87
done defining relationships in hierarchy of services?
No
Yes
88
end: wait for next icon selection
90
cost info icon selected?
Yes
No
92
display a dialog which solicits name of a cost information formula to be entered and receive and store user input giving name
93 (FIG. 3D)
94
service action icon selected?
Yes
No
96
end: wait for next icon selection
98 (FIG. 3D)

FIG. 3D


94 (FIG. 3C)
display a dialog box that solicits the name of the service action to be defined, and receive and store name data entered by user
98
has this user been previously determined to be a high level or low level user?
99
high level user, lower skill
low level, high skill
perform steps 73, 75, 77, 79 and 81 except building blocks define primitives needed to define service actions instead of services
101
new service action or extension of an old service action?
100
new
extension
106
display dialogs to solicit input to define the data structures in the new service action: database model; relationships; cost info; schedule info; fulfillment workflow; validation logic; approval workflow; and consumed resources
102
display list of existing service actions and receive and store user input selecting one service action which new service action will be based upon. Make fields of selected service action available for definition of data structure of new service action with certain constraints
104
display one or more dialog boxes that solicit user input that define the fields in the data structure that define the instantiation of the service action and receive and store user input that defines the fields
92 (FIG. 3C)
display dialog that requests user to enter cost formula and receive and store user entered input defining formula
93
next: wait for another icon to be selected
95

REPLACEMENT SHEET



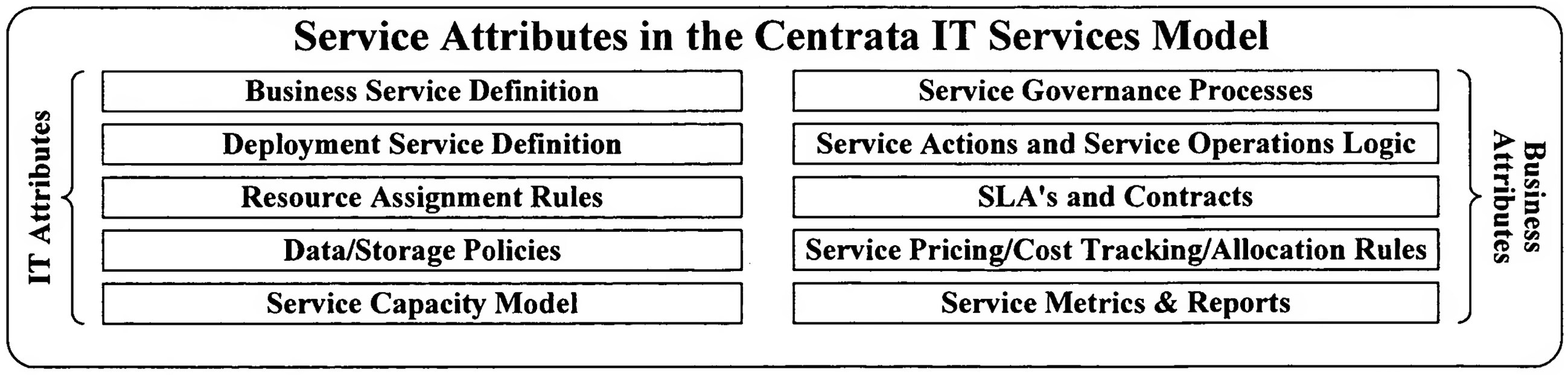


FIG. 4

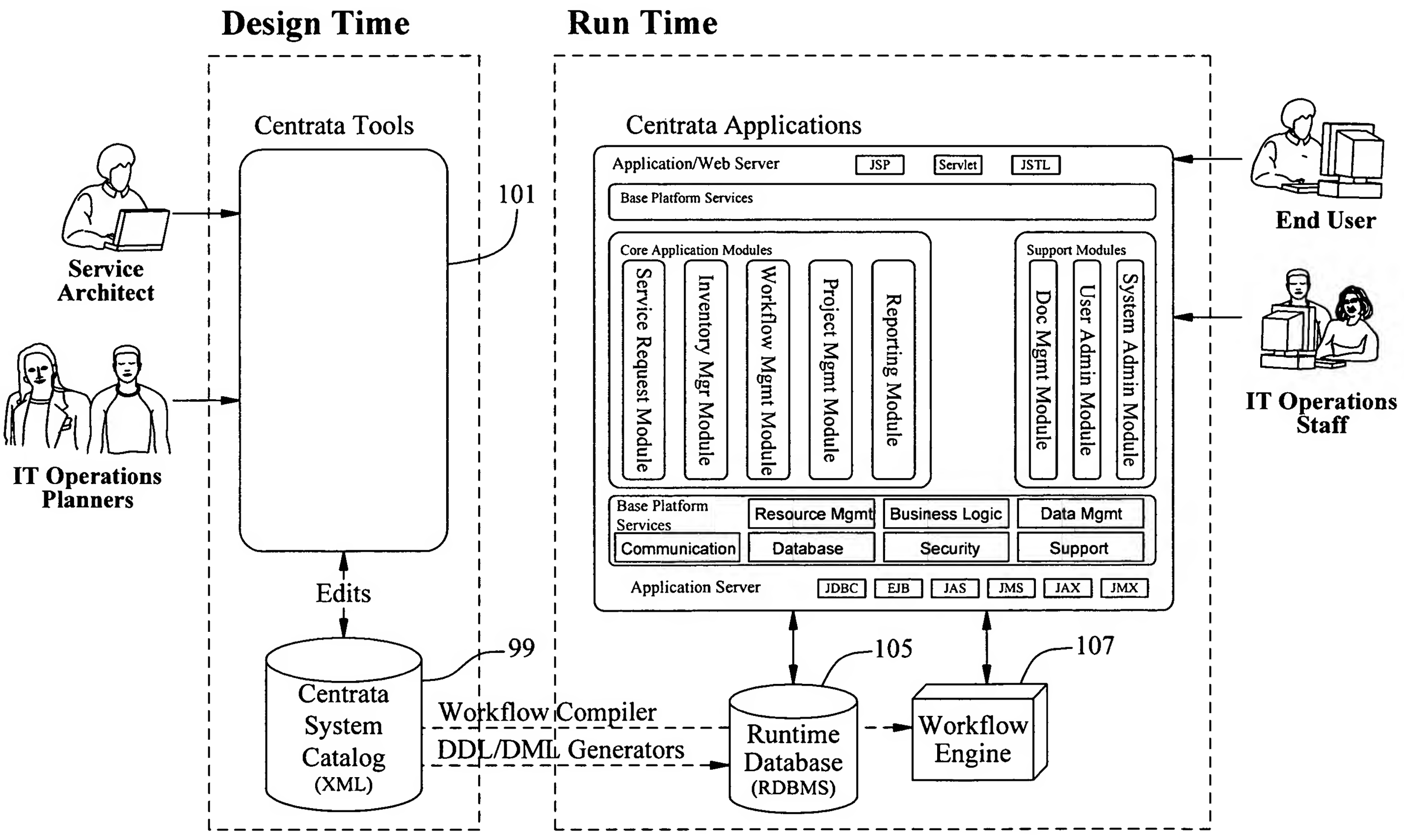
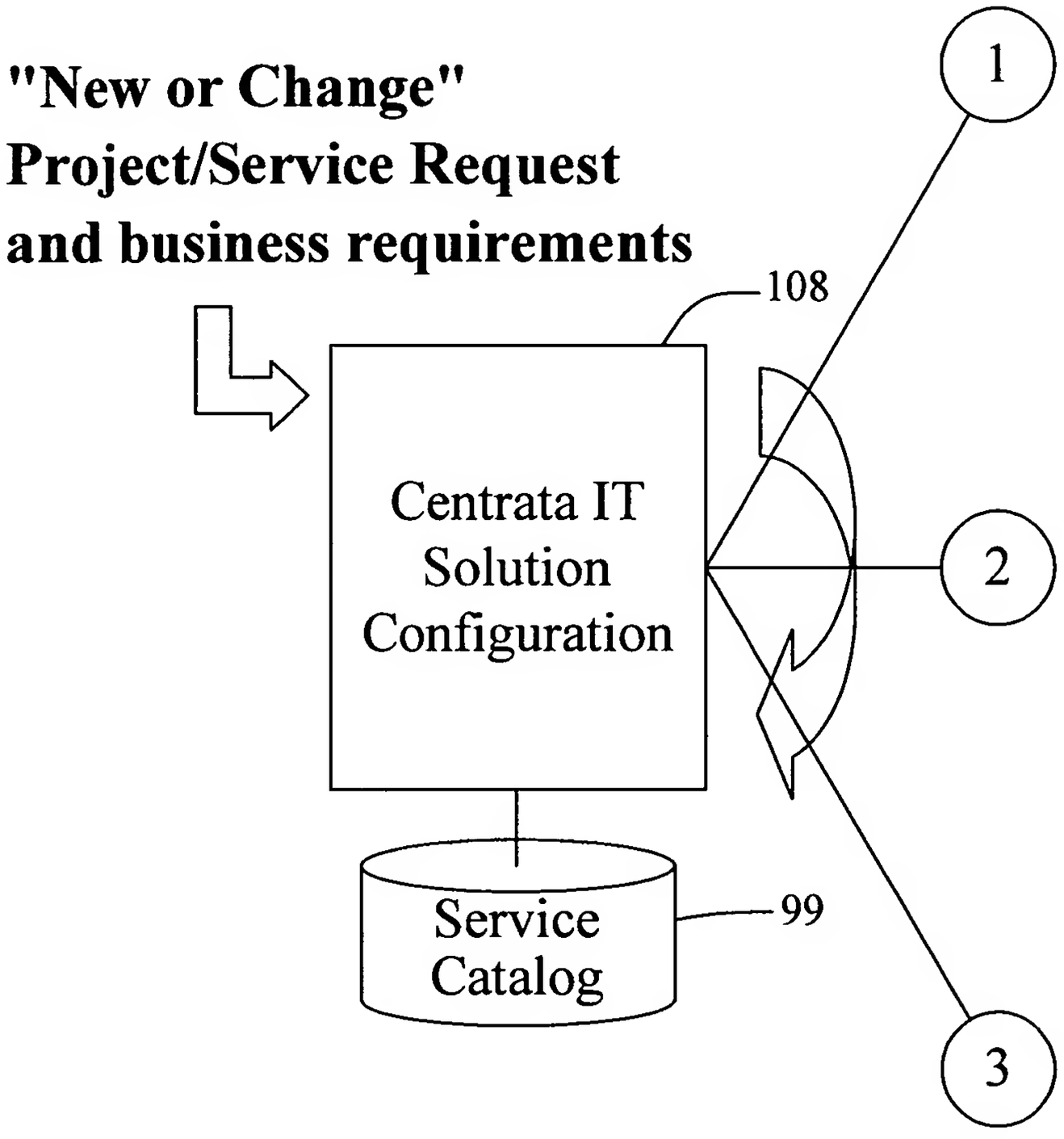
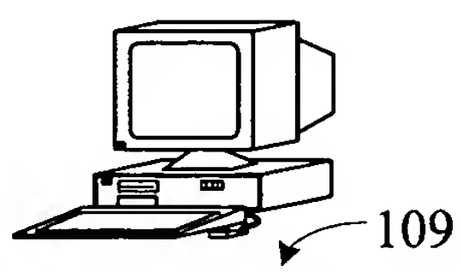

Design Time
Run Time
Centrata Tools
101
Centrata Applications
Application/Web Server
JSP
Servlet
JSTL
Base Platform Services
Core Application Modules
Service Request Module
Inventory Mgr Module
Workflow Mgmt Module
Project Mgmt Module
Reporting Module
Support Modules
Doc Mgmt Module
User Admin Module
System Admin Module
Base Platform Services
Resource Mgmt
Business Logic
Data Mgmt
Communication
Database
Security
Support
Application Server
JDBC
EJB
JAS
JMS
JAX
JMX
End User
IT Operations Staff
Service Architect
IT Operations Planners
Edits
99
Centrata System Catalog (XML)
Workflow Compiler
DDL/DML Generators
105
Runtime Database (RDBMS)
107
Workflow Engine

FIG. 5

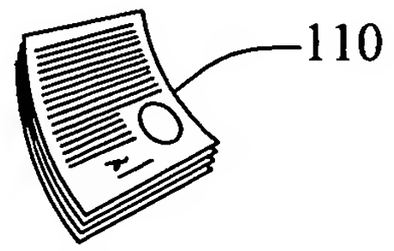


Solution request configuration process is iterative
Each output type can be fine-tuned by changing request configuration parameters
Side-by-side comparisons of alternative configurations and their associated cost & risk profiles are provided

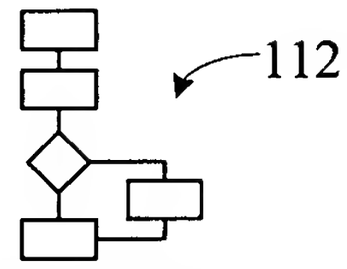
Project/Service Fulfillment Information



RFS's & SR's



BOM's



Workflows

Solution Costs (TCO)

NRE	($,000s)
Infrastructure	2,350
Software Licenses	1,358
Application Development	4,500
Deployment	800
Total NRE	9,008

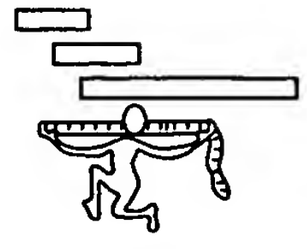
114

Premium Expense (Annual)	($,000s)
Infrastructure Maintenance	423
Software Maintenance	244
7x24 Support	450
Application Support	1,801
Total recruiting	2,918

116

Development, deployment, maintenance

Delivery and Quality Metrics



Six Sigma and other project governance and delivery metrics

FIG. 6

CONFIGURATION PROCESS TO RECEIVE AND VALIDATE USER REQUESTS FOR IT SERVICES AND CONVERT THEM TO SPECIFICATIONS FOR A FULFILLMENT PROCESS

FIG. 7A

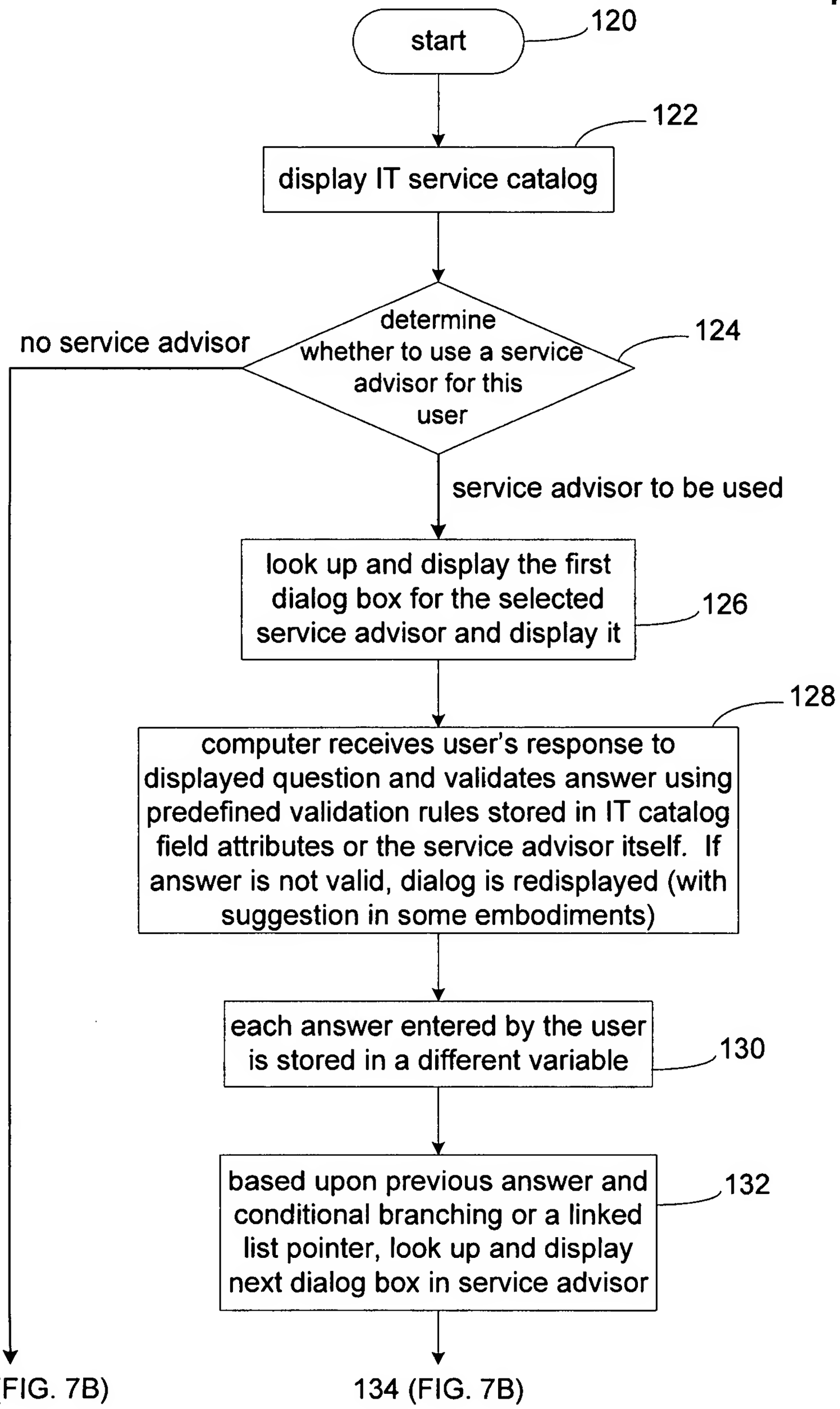


FIG. 7B

124 (FIG. 7A)

132 (FIG. 7A)

receive user input answer to displayed question and validate using validation rules. Redisplay dialog box if answer is invalid — 134

repeat the process of branching to appropriate dialog box based upon entered answers, displaying dialog boxes, receiving user input answers to posed questions and validation of answers and redisplaying dialog boxes if answers invalid until a leaf on the decision tree is reached and a specific service action can be recommended and storing recommendation of service action. It is possible that multiple service actions can be recommended — 136

gather all encountered recommendations for service action and display — 138

computer automatically fills in all fields of data structures of all recommended service actions using validated data entered by the user in response to questions posed by the service advisor dialog boxes — 140

computer solicits user to fill in any fields including relationship fields of the data structure(s) of the recommended service action(s) and receives data user enters. In some embodiments, the computer automatically validates new data entered by user using validation rules stored in attributes of fields user is filling in. Valid data is stored in the appropriate field. Invalid data is rejected and the user is given another chance to enter valid data. Output of validated completely filled out service request that contains bill of materials, cost estimates and workflow/task lists for approval and fulfillment processes. — 142

end

REPLACEMENT SHEET

THRESHOLD APPROVAL PROCESS TO OBTAIN MANAGEMENT APPROVAL FOLLOWED BY FULFILLMENT PROCESS TO GENERATE WORKFLOWS TO BRING INSTANCE OF REQUESTED SERVICE INTO EXISTANCE

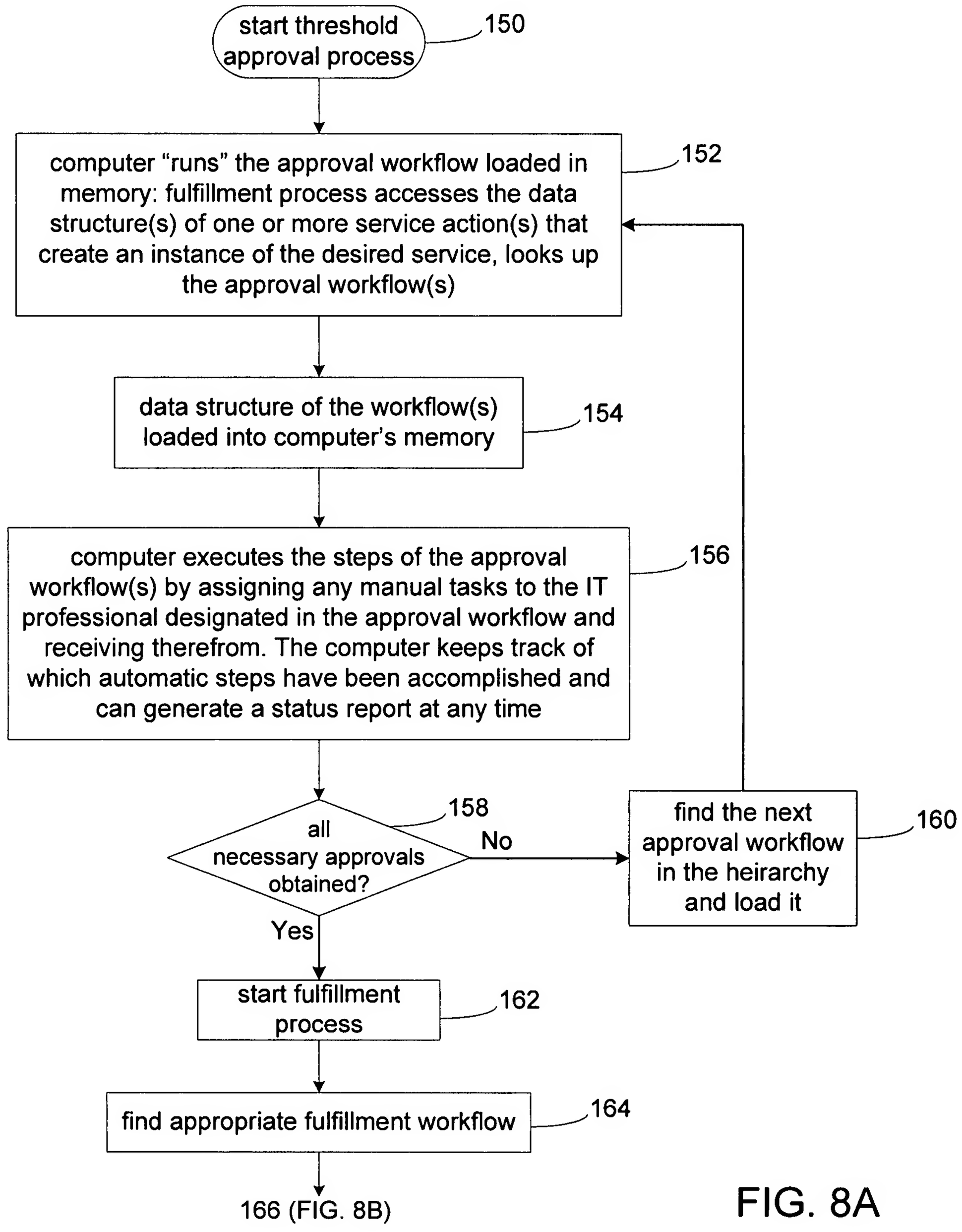


FIG. 8A

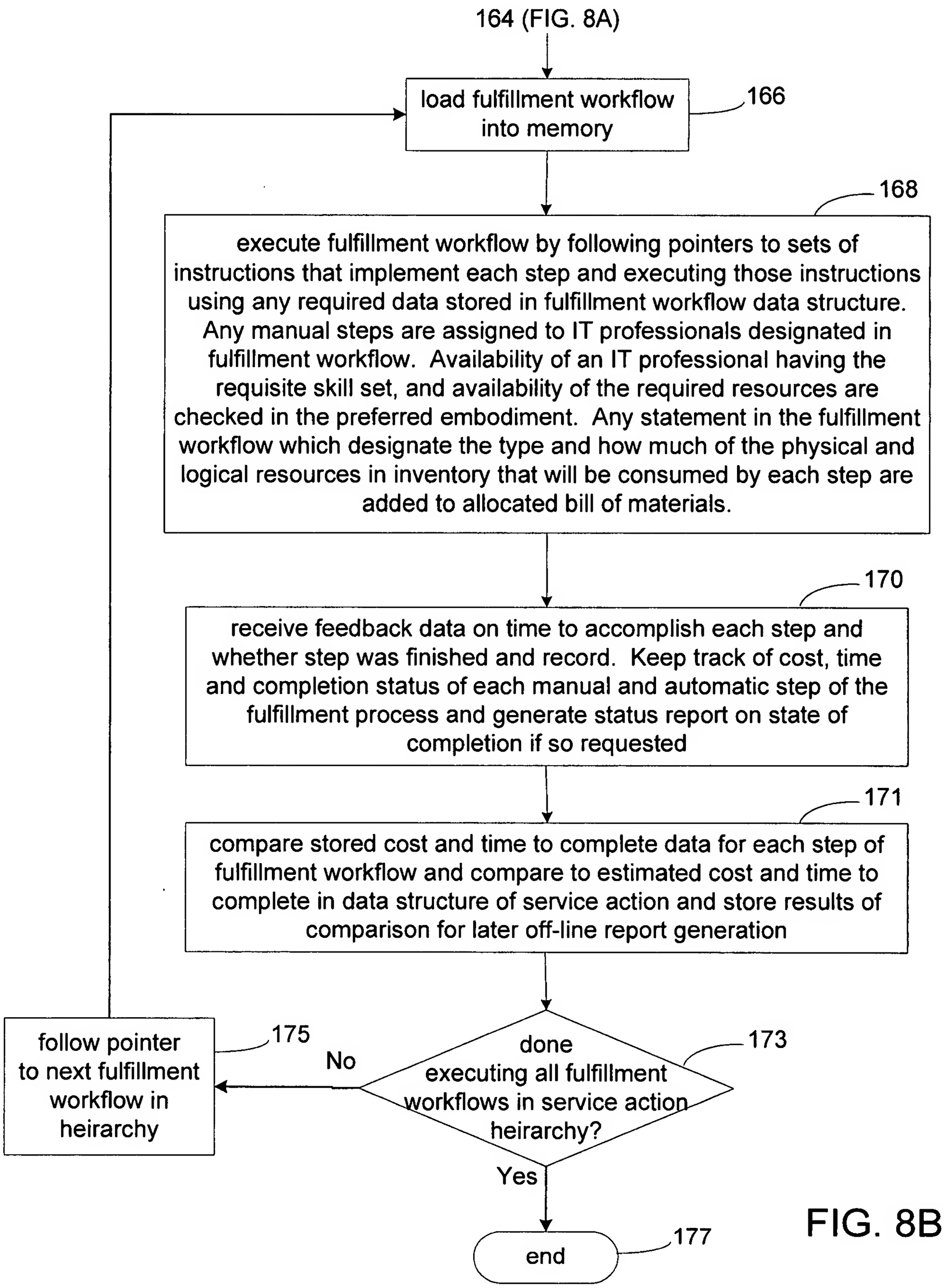

164 (FIG. 8A)
load fulfillment workflow into memory
166
168
execute fulfillment workflow by following pointers to sets of instructions that implement each step and executing those instructions using any required data stored in fulfillment workflow data structure. Any manual steps are assigned to IT professionals designated in fulfillment workflow. Availability of an IT professional having the requisite skill set, and availability of the required resources are checked in the preferred embodiment. Any statement in the fulfillment workflow which designate the type and how much of the physical and logical resources in inventory that will be consumed by each step are added to allocated bill of materials.
170
receive feedback data on time to accomplish each step and whether step was finished and record. Keep track of cost, time and completion status of each manual and automatic step of the fulfillment process and generate status report on state of completion if so requested
171
compare stored cost and time to complete data for each step of fulfillment workflow and compare to estimated cost and time to complete in data structure of service action and store results of comparison for later off-line report generation
173
done executing all fulfillment workflows in service action heirarchy?
No
175
follow pointer to next fulfillment workflow in heirarchy
Yes
177
end

FIG. 8B